

Claims

1. Apparatus for estimating the weight of an occupant of a vehicle seat supported by first and second floor brackets secured to a vehicle floor, the apparatus comprising:

5       a load cell including first and second rigid plates, and a fluid-filled bladder interposed between said first and second rigid plates;

          fastener means for securing said load cell between a frame of said seat and said floor brackets such that said load cell spans an open space between said first and second floor brackets, said fastener means including compliant  
10       elements for preloading said bladder between said first and second plates, and substantially non-compliant elements for preventing separation of said seat from said floor brackets; and

          a pressure sensor coupled to an exit port of said bladder for sensing a pressure of the fluid in said bladder that provides an indication of the weight of  
15       the occupant.

2. The apparatus of Claim 1, wherein said compliant elements are springs or foam pads interposed between said seat and said load cell.

3. The apparatus of Claim 1, wherein said compliant elements are springs or foam pads interposed between said floor brackets and said load cell.

4. The apparatus of Claim 1, wherein said non-compliant elements are bolts passing through apertures in said load cell.